

AMENDMENTS TO THE CLAIMS

Please add new claims 32-45 and cancel claims 1-31, as set forth below.

The current listing of claims replaces all prior listings.

Claims 1-31 (Canceled).

32. (New) A composition formulated for administration into an arthritic or inflamed joint in a mammalian subject, comprising a nucleic acid molecule with a sequence encoding a polypeptide that promotes apoptosis in mammalian cells.

33. (New) The composition of claim 32, which induces apoptosis in synoviocytes present in a joint to which it is administered.

34. (New) The composition of claim 32, wherein the nucleic acid molecule is an expression vector in which said polypeptide encoding sequence is operably linked to a promoter that promotes expression of the encoded polypeptide in fibroblast-like synoviocytes.

35. (New) The composition of claim 32, wherein the nucleic acid molecule is a viral vector.

36. (New) The composition of claim 35, wherein the viral vector is an adenovirus.

37. (New) The composition of claim 35, wherein the viral vector is replication deficient.

38. (New) The composition of claim 32, wherein said polypeptide encoding sequence is an apoptosis gene.

39.(New) The composition of claim 32, wherein the polypeptide is selected from p53, p21 Waf, ras, proteins in the Bax family, and proteins in the ICE family.

40.(New) The composition of claim 32, wherein the polypeptide is a peptidomimetic or binding agent of p53, p21 Waf, ras, a protein in the Bax family, or a protein in the ICE family.

41. (New) The composition of claim 32, wherein the subject has rheumatoid arthritis.

42. (New) The composition of claim 32, wherein the subject has ankylosing spondylitis, psoriatic arthritis, or inflammatory bowel disease.

43. (New) The composition of claim 32, formulated for administration to a human subject.

44.(New) A method for promoting apoptosis in synoviocytes in an inflamed joint in a mammal, comprising administering a composition according to claim 32 into said joint.

45.(New) A method for treating rheumatoid arthritis in a mammalian subject, comprising administering into an arthritic joint in said subject a composition according to claim 32.